

# Midwest CHU

Climate Hub Update

Winter 2018

## Promoting Climate-Informed Decisions Since 2014.

### National Climate Assessment 4: Your Input is Requested on Chapter Drafts

The National Climate Assessment evaluates the current state of the nation's climate including how climate is impacting the country and what projections indicate for future issues. This assessment is required by Congress every 4 years and is an outstanding collaboration of federal, academic and state scientists on what issues the country faces in regard to climate.

Two issues are of interest for the Midwest Region: First is the release of the Climate Science Special Report. This document is the basic science behind the overall assessment on what is impacting the climate and how it is likely to change. Select Here for the final version of this report.

In addition to the science report there are numerous sectoral and regional chapters written for the general public. These are currently in draft format and open for review and public comment. The ones of most interest may be the Midwest and Agriculture chapters. Select Here to review and comment on these drafts.

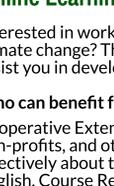


**\*\*The deadline for providing comments is January 31st, 2018. Final versions of these will be available some time in 2018.\*\***



Note: The Midwest Climate Hub's Dr. Dennis Today, Director, is one of the co-authors of the Midwest chapter and Erica Kistner, Fellow, contributed information. All of the USDA Climate Hubs have contributed to this effort across the country.

### Monthly North Central U.S. Climate and Drought Webinar Series



The National Oceanic & Atmospheric Administration (NOAA), USDA and many other climate partners produce a monthly briefing that covers the region from the Rockies to the Great Lakes. Subject matter includes a summary of past and current conditions in terms of many climate variables like snowpack, temperatures, precipitation, etc... In addition, potential and ongoing impacts from climate phenomena are considered across sectors (agriculture, water resources, etc...). Outlook information from two weeks to the next few months/seasons will be discussed. Select Here to learn more and to sign up for this web series. \*Note you only need to sign up once to be included in the current and following webinars.

### Online Learning: Climate Change Science, Communication, and Action

Interested in working toward climate solutions? Want to learn more about how to talk to people about climate change? This 4-week course covers the basics of climate change, from science to action, and will assist you in developing a consistent climate message.

#### Who can benefit from this course?

Cooperative Extension Educators, Master Volunteers, state and local government, land-trusts and other non-profits, and others interested in an introduction to climate change science and in how to communicate effectively about this important topic. Available to students in any country. Lectures and readings are in English. Course Registration is \$20 and participants who complete the course will be awarded a Cornell University certificate

#### When?

January 23-February 13, 2018 with a registration deadline of January 22nd. For more information, select Here.



## CHU in Every Issue...

### Midwest Ag Focus Climate Update: January 2, 2017

The extreme cold has impacted livestock across the region with the sharp turn to colder temperatures. Cold temperatures set in across much of the Upper Midwest before snow covered the soil. Without that insulating effect, soils were able to freeze more readily. Most soils throughout the region were also fairly dry allowing the soil to freeze at depth more easily. With the consistent extreme cold and more cold likely into January, frost depths will continue to penetrate deeper causing potential problems for water supplies for livestock and potentially homes. Monitoring frost depths would be a good idea: Cold conditions in the winter of 2013-14 caused some water lines to freeze throughout the Upper Midwest. The early winter warmth may have helped limit the potential problems by keeping the soils warmer this winter.



Frost depths will continue to deepen throughout the winter because cold takes time to penetrate to deeper soil depths. The main dryness impacts are in Missouri/Illinois/Iowa where the longer term dryness (in some places since last year) has left farm ponds low, limiting water for cattle and reducing feed availability in some places.

For more information and for the entire Midwest Ag-Focus Outlook, select Here.

### Regional Outlook for the Midwest

In collaboration with NOAA and the Midwest Regional Climate Center, we are pleased to provide the following Winter 2018, Regional Outlooks. The Midwest, Missouri Basin, and Great Lakes regional outlooks can be accessed by clicking on their titles to the right.

[Missouri River Basin](#)

[Great Lakes Region](#)

[Midwest Region](#)

### Meet the Midwest Climate Hub NRCS Liaison: Adam Dowling

The USDA Climate Hubs have engaged the USDA National Resource Conservation Service (NRCS) by way of creating Liaison positions. The NRCS Project Liaison serves as a subject matter link for relevant USDA programs and research staff to inform, develop, and implement Hub strategies and implementation efforts for the 2018 year.

Our newly assigned Liaison, Adam Dowling, will furnish knowledge of technical standards, conservation practices and tools, soils data, and technical assistance to help the Midwest Climate Hub fulfill their mission of assisting agriculture producers in improving their climate-informed decisions. More about the projects we plan with Adam will follow in the coming year.



Until then, a little more about Adam Dowling: Growing up in the Driftless Region of Southwestern Wisconsin, Adam enjoyed helping out his beef-farmer neighbor in Dane County, dairy-farming uncles in Grant County and dairy-farming grandpa in Iowa County. After receiving a B.S. in Natural Resources Environmental Studies from the University of Minnesota Twin Cities, Adam served his country for 3.5 years in the Peace Corps. Initially, Adam was an Agro-Forestry extension agent and later a regional coordinator in Guinea, West Africa. Upon completion of his Peace Corps tour Adam was hired by the USDA NRCS and is currently the District Conservationist in Dane County.

Adam enjoys being a part of a community that works towards helping people improve the land and water and is looking forward to an opportunity to utilize my accumulated NRCS knowledge and to expand the interactions between the climate hubs and NRCS.

**Some Fun Facts about Adam: He is a huge fan of PBS; He was a logistician for two eyeglass missions to Guinea, West Africa in 2006 and 2009; He enjoys all types of "silent" sports (road and mountain biking, cross-country skiing and running); He also enjoys drawing and reading books with his 10 and 7 year old daughters and 5 year old son.**

### On the Radar

\*\*\*A next to the event indicate that the USDA Midwest Climate Hub will be present at this event, either as a speaker, or at a booth. Please write [midwestclimatehub@ars.usda.gov](mailto:midwestclimatehub@ars.usda.gov) for more information.



### 26th Annual National No-Tillage Conference

January 9-12, 2018: Louisville, KY

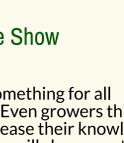
Behind the theme, "Building More Profitable No-Till Systems," we've lined up nearly 40 top-notch no-tillers, agronomists, researchers and other no-till experts to deliver innovative ideas that can help you get the most out of your no-till farming system. This 26th annual conference offers 13 General Sessions, 24 No-Till Classrooms and 80 No-Till Roundtables.

For more information and to register for the conference, select Here.

### 2018 Illinois Specialty Crops, Agritourism, and Organic Conference & Trade Show

January 10-12, 2018: Springfield, IL

The Illinois Specialty Growers Association (ISGA) was formed in 1989 to improve the coordination and cooperation among our individual associations. ISGA is an umbrella organization for the following affiliated associations: Illinois Herb Association, Illinois Irrigation Association, Illinois State Horticultural Society, and Illinois Vegetable Growers Association.



For more information and to register for the conference, select Here.

### Upper Midwest Regional Fruit & Vegetable Growers Conference & Trade Show

January 18-19, 2018: St. Cloud, MN

The 2018 Upper Midwest Regional Fruit and Vegetable Growers Conference has something for all commercial fruit and vegetable growers from the well established, to new growers. Even growers thinking about commercial horticultural production, will find workshops and sessions to increase their knowledge and capabilities. In addition to outstanding educational sessions, a variety of vendors will showcase their products at the Trade Show. Registration includes a continental breakfast and lunch each day. Attendees are invited to stay Thursday evening from 4:15-5:30pm for a social hour, with hosted appetizers and a cash bar.

For more information and to register for the conference, select Here.



### Wisconsin Fresh Fruit & Vegetable Conference

January 21-23, 2018: Wisconsin Dells, WI

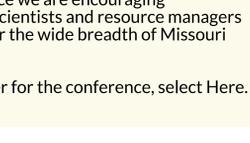
The 2018 Wisconsin Fresh Fruit & Vegetable Conference will be held at the beautiful Kalahari Resort in Wisconsin Dells, Wisconsin. The Trade Show will be Monday, January 22 and Tuesday, January 23, 2018.

For more information and to register for the conference, select Here.

### 2018 Indiana Hort Congress

February 13-15, 2018: Indianapolis, IN

The Indiana Horticultural Congress is an educational meeting designed to meet the needs of fruit, vegetable, wine, organics, and specialty crop growers and marketers in Indiana and surrounding states. All interested individuals are invited to attend.



For more information and to register for the conference, select Here.

### 2018 MRNRC Missouri River Conference

March 20-22, 2018: Nebraska City, NE



The Missouri River Natural Resources Committee invites you to attend and/or present at the 2018 MRNRC Missouri River Conference. At this year's conference we are encouraging professional and student research scientists and resource managers to submit presentations which cover the wide breadth of Missouri River natural resource issues.

For more information and to register for the conference, select Here.

## Additional Resources

### ARTICLE: Analysis Defending Crop Insurance

### Farm Futures

Can crop insurance Reward conservation? An in-depth expose on the interactions between financiers, crop insurance, the Farm Bill and conservation. "The last farm bill debate tied conservation compliance to crop insurance for the first time, requiring every farmer to have a conservation plan in place if they wanted to receive premium subsidy assistance. But having a conservation plan in place is nothing to the level of saving farmers money on the premium side of crop insurance if they implement no-till or make cover crops part of their rotation." Select Here to read more.

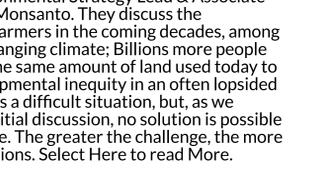
### ARTICLE: Cover crop project will lead to cleaner water

### Des Moines Register

"Iowa is launching a first-in-the-country 'good farmer discount' for cover crops through crop insurance premiums, which could become a model for the nation. It will provide a small, \$5 per-acre incentive for cover crops planted on 'new' cover crop acres, which are not already receiving cost share for the practice. The state will provide the funding... While the differing attitudes of farmers and environmentalists are widely discussed, there are many things we agree on." Select Here to find out more.

### Climate Interactive

Climate Interactive creates interactive, scientifically rigorous tools that help people see connections, play out scenarios, and see what works to address the biggest challenges we face. Based on a long tradition of system dynamics modeling out of MIT that explores the interplay between social and planetary systems, our simulations cover a range of topics, from climate change and clean energy to disaster risk reduction and resilience.



### ARTICLE: Agricultural Evolution Carbon Neutral, Climate Smart

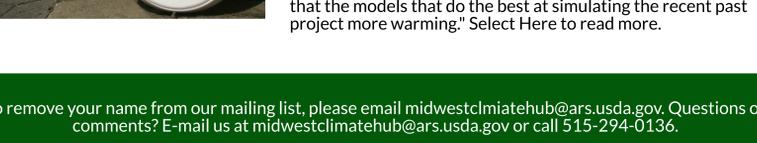
In the first part of this series on Climate Smart Agriculture, TriplePundit spoke with Dr. Jeff Seale, Agricultural Environmental Strategy Lead & Associate Science Fellow at Monsanto. They discuss the challenges facing farmers in the coming decades, among them: A rapidly changing climate; Billions more people to feed on about the same amount of land used today to grow food; Developmental inequity in an often lopsided global economy. It's a difficult situation, but, as we alluded to in our initial discussion, no solution is possible without a challenge. The greater the challenge, the more thorough the solutions. Select Here to read More.

### PUBLICATION: The Role of Bioenergy in a Climate-Changing World

Global climate and environmental changes related to the use of fossil fuels and inequitable development make it unethical not to pursue more equitable energy development that includes bioenergy. To achieve sustainable development, competitiveness and costs of bioenergy production need to be addressed in a manner that considers not only economic gains but also development of local knowledge and social and environmental benefits. Select Here to read more.

### Health and Climate Change Toolkit for Project Managers

The climate change and health toolkit is a one-stop resource containing key resources that address climate change and health issues. It is intended for planners, policy makers, and those working at the policy/practice interface. The World Health Organization will keep this resource updated with the latest publications. Publications are sorted by the eight topics represented below, by type, geographic focus and year of publication.



### ARTICLE: The Most Accurate Climate Models Predict Greater Warming, Study Shows

This article describes, and links to, a new study comparing global climate models carries a warning for policy makers and scientists: We may be underestimating the risks ahead. "The basic idea is that we have a range of projections on future warming that came from these climate models, and for scientific interest and political interest, we wanted to narrow this range," said Patrick Brown, co-author of the study. "We find that the models that do the best at simulating the recent past project more warming." Select Here to read more.